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# Improving Health Outcomes and Lifestyle Choices in an Underserved Community Through the Implementation of a Wellness Program

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IMPROVING HEALTH OUTCOMES AND LIFESTYLE CHOICES IN AN UNDERSERVED  
COMMUNITY THROUGH THE IMPLEMENTATION OF A WELLNESS PROGRAM

BY

Ekaterini Boutos

DNP Final Scholarly Project Committee

Dr. Mary Ellen Roberts, Chair

Dr. Maureen Byrnes

Beverly Moore-Clark, LSW

Submitted in partial fulfillment of the  
Requirements for the degree of Doctor of Nursing Practice

Seton Hall University

2017

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Date: 3/1/2017



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## Acknowledgments

It is with utmost gratitude that I would first and foremost like to acknowledge Dr. Mary Ellen Roberts, the DNP Program Director of Seton Hall University. Dr. Roberts was present and involved throughout my entire doctoral academic career. She assisted me in crafting and executing my project all the while serving as a mentor, a teacher, a listener and a visionary. It has been a blessing to have her as my guide while completing my coursework and as an exemplary role model in displaying the profoundness of being an advanced practice nurse.

This project would also not have been possible without the involvement of Dr. Maureen Byrnes, who served on the DNP Final Scholarly Project Committee. Dr. Byrnes was an integral component in completing this work, and her input and expertise enriched the outcomes of my project.

I am unable to fully express how honored I am to have spent time with the community of Prospect House. I want to acknowledge Prospect House for opening up their doors and allowing me to share my project with their facility. I would like to thank the staff members for showing such compassion and being so involved with the noble visions of Prospect House. Finally, I want to wholeheartedly acknowledge the amazing individuals who are members of Prospect House. They are a true representation of the magic and strength of a community, even in the face of the challenges of mental illness. We can become agents for positive change once we learn to engage with each other in a way which embraces openness, connection and compassion. This is a truth which is inherent within the members of Prospect House.

### Dedication

This project is dedicated to two women who have devoted their lives towards alleviating the suffering of those afflicted with mental illness. Gina Herd, LCSW and Deborah Wolf, Ph.D., who have shown countless people the path towards recovery and the beauty of existence. May you keep shining and spreading the light of consciousness.

### Discovering wellness: how a personal journey evolved into a project

Much of my professional career as a registered nurse was spent staffing a high volume level I trauma emergency room in the South Bronx of New York City, an area known to have some of the highest poverty and crime rates in the region. Besides offering medical services, my facility also provided mental health services. Because of this, my encounters with individuals afflicted by mental illness were frequent. As I served my role as a nurse among this patient population, I quickly gained insight of the difficulties involved in navigating the mental health system as a patient. It became a personal endeavor of mine to maintain a compassionate, open and unbiased stance when engaging with my patients, and after listening to their stories over the years, I realized how truly thin the line was between stability and chaos.

It became a harsh realization that the reason I was wearing scrubs and a stethoscope as opposed to a blue hospital gown was because I was fortunate enough to have resources and a support system readily available to me. This is not the case for most people in underserved populations, and knowledge which we take for granted is actually worth its weight in gold among these individuals. It became common practice for me to teach my psychiatric patients breathing exercises for anxiety, provide them with music for distraction and sit next to them to have honest conversations about their medical concerns.

It was evident from the beginning of my Doctor of Nursing Practice (DNP) academic career that I wanted to focus the scope of my project on an issue pertaining to mental illness. The opportunity to create a wellness program at Prospect House was a pleasant response to this inquiry. More recently, having worked as a family nurse practitioner, I have witnessed the level of impact my role has on those under my care and on the medical personnel that surround me. It is my goal as a DNP educated nurse practitioner to create a space within the healthcare system

which serves to fuel the clinical evidence towards promoting the unification of physical, emotional and mental wellness.



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### Abstract

**Purpose:** The purpose of this project was to implement a wellness program with the purpose of bridging the gap in lifestyle and disease knowledge in a socioeconomically vulnerable mentally ill population. The participants were members of an adult day mental health facility which aided the local underserved population. The wellness program emphasized improving knowledge of chronic health conditions, healthy lifestyle habits and the practice of mindfulness meditation.

**Significance:** The significance of this project is the advancement of health status via health education from a wellness perspective. Vulnerable populations who are at higher risk of chronic physical and mental illness can use the knowledge acquired to induce positive health changes from programs such as this. The knowledge imparted from this program can also serve to supplemental health education typically provided during a medical office visit.

**Methods:** The methodology employed in this project included identification of a project initiative and audience, performance of a needs assessment, investigation of the current literature, incorporation of a theoretical framework, obtainment of organizational and stakeholder support, implementation of the project and lastly an evaluation process of the project.

**Project Outcomes:** Participants benefited from the wellness program by receiving health and lifestyle education and mindfulness meditation techniques. Case Managers were confident that the project was useful to the needs of the population the facility served.

**Clinical Relevance:** The project serves as a model for future wellness programs in similar facilities and towards creating informational sessions to supplement the health education provided in primary care and specialty medical practices.

*Keywords:* mental illness, lifestyle, wellness, wellness program, chronic disease, health, health promotion, health beliefs, health education, vulnerable population, disease management

## SECTION 1 BACKGROUND

High rates of disease morbidity and mortality are prevalent in the mentally ill in addition to a reduced life expectancy compared to the general population. Among the most prevalent chronic conditions affecting this group are cardiovascular disease, diabetes mellitus, obesity, respiratory disease and metabolic disorders. Individuals with severe mental illness are twice as likely to be afflicted with these disorders (Happel, et al., 2011; McCloughen, Foster, Kerley, Delgado, & Turnell, 2016). Much of these adverse health outcomes and disparities revolve around modifiable risk factors. One of this author's interventions will be a disease prevention and management project utilizing a health promotion education model.

Secondary to the dissociation between psychiatric and medical care prevalent in the United States, the medical needs of the mentally ill are often not adequately tended to, in particular among those patients diagnosed with schizophrenia (Meyer & Narsallah, 2003). Additional contributors to this vulnerable state are the unhealthy lifestyles of those diagnosed with this disorder. Smoking, sedentary habits, substance abuse and poor dietary take are rampant in this population (Meyer & Narsallah, 2003). Inadequate medical follow-ups further burden the physical health of the mentally ill. Even in the presence of medical care, communication barriers may interfere with adequate delivery of care (Meyer & Nasrallah, 2003).

Meditation has gained popularity in medicine for both psychiatric and physical disorders. Historically, it has been the first mind-body intervention to be incorporated by healthcare providers. Among some of the documented medical benefits of meditation are management of stress, improvement in cardiovascular health and reduction of blood pressure. Long-term use of meditation has also been shown to have potential benefits in reducing the rate of cortical atrophy

and decline of cognition (Anderson, Liu, & Kryscio, 2008; Grossman, Niemann, Schmidt, & Walach, 2004; Pagnoni & Cekic, 2007; Paul-Labrador, et al., 2006).

Mindfulness meditation has been present in Buddhist practice for 2600 years (Shonin & Van Gordon, 2016). It is practiced by taking a nonjudgmental stance on the present moment and instead of fleeing from an undesirable experience, learning to be with it (Wegela, 2010).

Mindfulness based interventions (MBIs) in healthcare settings are typically guided by breathe observation as a focus of attention. This technique is indicated in placating thinking patterns and opening a mental space for meditative concentration to occur. In more advanced forms of this practice, individuals are able to reach meditative concentration without attention anchors such as the breath. Numerous mechanisms have been identified to describe the mechanism by which mental health can be improved with mindfulness practices such as meditation. Mindfulness meditation is theorized to affect biological, psychological, social and spiritual psychopathology elements (Shonin & Van Gordon, 2016).

### Description of Project

The project was executed in a day mental health facility which served as a psychosocial rehabilitation facility for adult individuals diagnosed with mental illness located in urban Northern New Jersey. The services offered at this facility included various training programs for the development of pre-vocational and social skills as well as case management services for financial and housing assistance, group and individual counseling services, educational support and substance abuse support. Within the building there also existed a publically funded primary healthcare clinic staffed by nurse practitioners as providers to address the medical needs of those

receiving services from the facility.

### Guideposts of the Project

The project was driven by a combination of health and wellness literacy classes and regular guided mindfulness meditation sessions. Executing this work entailed the following functions:

1. Providing health, wellness and disease management education on-site weekly
2. Allowing the opportunity for the audience to ask health seeking questions
3. Delivering a ten minute guided mindfulness meditation following each health lesson
4. Producing a reference book as a manual for future use at the facility and similar facilities to enable recreating the wellness program

### Participants in the Project

The individuals that participated in the wellness program were persons from the Member Services division. Member Services consisted of a wide variety of individuals with an emphasis on persons who exhibited increased symptomatology of psychiatric illness and who generally were identified as being a higher risk group. Case Managers were also on site during the programs delivery as part of the evaluation process. During each class, one Case Manager was present who was responsible for generating a group note. The group note was a synopsis of the material that was covered during the class. The group note was then reviewed by the Unit Leader who assessed the applicability and quality of the classes offered as they pertained to the mission and services of the facility. Typically each class consisted of

25-35 Member Services participants. A total of seven Case Managers were utilized during the duration of the program.

### Purpose of the Project

Wellness programs have been implemented in a variety of settings and capacities including schools, places of employment and both inpatient and outpatient healthcare facilities. The purpose of the project was to evaluate the effectiveness of a health, wellness and meditation educational program when implemented in an adult outpatient psychosocial rehabilitation center. It also served as a prototype for creating similar programs on health maintenance, chronic diseases and meditation. The project was aimed towards filling in knowledge gaps on disease management, positive lifestyle modifications and meditation benefits in the vulnerable population of the mentally ill.

### Project Outcomes

The outcomes of the project are that participants in the wellness program gained a higher level of comprehension on some of the most prevalent chronic health conditions. The attendees were also introduced to the concept of the mind-body connection and given basic mindfulness meditation strategies. Participants with health knowledge gaps were given the opportunity to actively engage in question and answer sessions with the lecturer to improve their understanding of health and disease.

By permitting an open discussion on health and disease topics, participants were able to

openly discuss health and disease concerns, clarify misconceptions and inquire about health modifying behaviors. Additionally, participants in the program were equipped with stress reducing strategies through breath-work and meditation which they alternatively would not have been exposed to. A more latent outcome was that the participants incorporated the newly acquired information into their own medical care by asking their healthcare providers about disease prevention and management on the covered topics. The aim of the end product was to fortify the physical and mental health of disadvantaged populations with mental illness.

As a side effect of the improvement in member health and wellness literacy, the facility would be better equipped to meet their internal quotas of improved member health states. This includes increased member compliance in meeting the predetermined member health goals (such as body mass index, blood pressure and smoking status). In turn, this would improve the facility's odds of receiving funding and recognition as a successful psychosocial rehabilitation facility. It would also assist them in meeting their objectives and vision statement which promote individual empowerment, increased independence and self-management of psychiatric illness through individual growth and learning.

### Steps for Project Implementation

In implementing this project, four steps were carried out, each one with a unique scope but simultaneously incorporating the components of those before it.

The first step was largely an identification process. Here, the foundational questions were asked which generated the next stages towards the actuation of the project. At this step, the vision and goals of the mental health facility were reviewed to create a meaningful and



utilizable translation into the author's project. The characteristics of the audience were identified such as the number and age range of the participants which would be attending the classes. In addition, factors such as whole program and individual class time were identified.

The second step heavily comprised of research. At this stage, the author selected proposed topics to discuss and delved into the subject matter. This process involved drafting lesson plans, creating supplemental material and handouts for the participants and selecting the appropriate props to facilitate learning. The author also researched general wellness program outlines, meditation practices and their use, teaching methods and program evaluation methods.

The third step was the active implementation component of the project. This consisted of weekly health literacy educational sessions which included a guided mindfulness meditation component. Each session covered one to two disease and health topics. Meetings with the author's project mentor also occurred as a means to debrief and address any inquiries. During this step, the author revisited the methodology and educational topics and strategies. Changes were made as necessary to improve time efficiency and the dissemination of information. Alterations to the program's outline and topics were made congruent to the audiences' learning styles, reading comprehension, inquiries and topic preferences. Additional research was also conducted during this step to facilitate the changes in the program.

The fourth step was a reflective and evaluative stage where the author reviewed her own feelings and observations of the program. This is also the step during which the program was evaluated via a questionnaire distributed to the seven Case Managers who were present during the program.

### Significance of the Project for Nursing

Nursing core values have a lengthy history of prioritizing health promotion. According to the American Nurses Association (ANA):

Nursing is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, facilitation of healing, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities, and populations (American Nurses Association, n.d.).

Health promotion in nursing is a platform to transform people, communities and the healthcare system.

The terms health education and health promotion are often used interchangeably. Realistically, the two differ in context. While health promotion focuses on the socioeconomic and environmental interplays affecting health, health education is in itself a narrower concept. Health education involves giving information and teaching individuals or groups of individuals how to achieve and maintain adequate vitality and improve health. Health promotion acts on a global level by identifying the external environmental, cultural, social, economic and political forces which affect health. Many even argue that it encompasses health education under its wing. The nurse's role then becomes one of a mediator between what the health needs of a person or group are and what interplay exists with the external societal forces (Raingruber, 2013).

Within healthcare there exists a tension between the disease focused health model and the more holistic health model. Nurses often find themselves in the crossfire between this war, having to take a reductionist approach in a health model which separates the mind and body through an illness dominant perspective (Whitehead, 2003).

Nursing activities are a perfect pairing for health promotion since the nursing profession regularly engages in lifestyle, behavior and risk mediated health education. Health education is an integral role of the profession, but reaching optimal health is not reliant solely on education. Often times people have attempted positive health changes prior to receiving health education. In this context the nurse then becomes the facilitator of change by engaging in an understanding of one's goals and knowledge and identifying barriers (Raingruber, 2013).

Health is affected by a multitude of factors, many not easily identifiable. For this reason, health promotion should include health education in conjunction with interventions to address the larger societal impulses which are impacting wellbeing. One need not become a political lobbyist or work for the National Institutes of Health to accomplish this. This project, having been executed at a day mental health facility sets an example of how community oriented programs focusing on independence and self-care can become even more integrative by pooling resources from within. Although this project was conducted addressing one particular group (Member Services), it is worth investigating future collaborations with the primary care clinic located on site to include a larger audience. A partnership between the primary care providers and the wellness program educator could easily lead to a more targeted series of lectures and educational material. The day mental health facility is already fundamentally operating to empower the disadvantaged through knowledge and social involvement. This project further expands on this operational model and on the vital diverse role nurses play in the health promotion arena.

This concept can be taken a step further and suggest making health promotion a specialized practice and profession not just within the healthcare professions, medicine and nursing. Under this view, health promotion core competencies, standards for accreditation and

scopes and standards of practice would be developed anew to befit the new role. Broadly, individuals in these roles would often work alongside nurses and other healthcare providers, aiming to generate change in communities, become leaders in promoting health policies, assess community needs, identify effective interventions, evaluate the usefulness of health programs and advocate on behalf of individuals and communities (Raingruber, 2013).

## SECTION II THEORETICAL FRAMEWORK AND LITERATURE REVIEW

### Theoretical Framework

Health promotion programs are most successful when reinforced by a clear understanding of the investigated health behaviors and their context. A theoretical framework elevates this ability by providing a systematic perspective of identifying events and situations. It lays out a foundation of concepts and descriptions which define, explain or predict these events and situations. It accomplished this by demonstrating the relationships between the numerous variables present within them (National Cancer Institute, 2005).

Models draw concepts from numerous theories to help shed light on a particular subject or problem. Health behavior and promotion theories tap into various disciplines such as psychology, sociology and consumer behavior. Explanatory theories describe why particular problems exist, which factors add to these problems and how they can be changed. The Health Belief Model, as depicted in the National Cancer Institute's (2005) publication guide, is the explanatory theory which was selected to guide the planning and development of this project

The Health Belief Model was constructed in the 1950s by social psychologists under the U.S. Public Health Service where it served as one of the first health behavior theories. Its conception was aimed at determining why participation in disease prevention and detection programs was lacking (National Cancer Institute, 2005).

The Health Belief model addresses an individual's awareness of a hazard posed by a health problem, the benefits of evading the threat and which factors might encourage or prevent one from acting to rectify this problem. Born from investigations under this theoretical model come six principles which are said to affect how people make decisions regarding preventing, screening for and controlling illness. People are believed to be ready to take action for their health if they fall under these six constructs (National Cancer Institute, 2005):

1. **Perceived susceptibility**- the belief that one is susceptible to the condition
2. **Perceived severity**- the belief that the condition leads to harsh consequences
3. **Perceived benefits**- the belief that taking action reduces one's proneness to the condition
4. **Perceived barriers**- the belief that the expense of taking action is outweighed by the benefits
5. **Cue to action**- there is exposure to influences that prompt action (such as a television commercial to get a mammogram)
6. **Self-efficacy**- there is confidence in one's capacity to successfully complete an action

The project promoted numerous behavioral change strategies which stemmed from these six constructs. Addressing the audience's views of their odds of getting a condition required evaluating what their level of risk was and how it was unique to this group. Education and information pertaining to the identified risks was tailored to be compatible with their learning

abilities and styles. An adjunct component to this process was helping them identify their risks and to develop a correct understanding of their risks.

Addressing the beliefs about the severity and consequences of a condition involved providing health lessons and an active dialogue with the participants. This process reinforced the consequences of many common chronic conditions and what actions to take which could prevent disease and restore and maintain health.

Addressing beliefs about the effectiveness of taking action to reduce health risks and disease severity occurred through explanations during the health lessons about how, where and when to take action and what the benefits of taking action are.

Addressing beliefs about the costs, both psychological and material, of taking action occurred through reassurance, highlighting the costs of not taking action and through the identification and correction of misinformation.

Providing the participants with factors that activated their desire to change occurred through generating awareness, providing them with basic strategies for lifestyle changes and information on how to get further information on disease management and health maintenance.

Stimulating the participants' confidence in their ability to take action occurred by reinforcing individual positive behaviors verbally, allowing participants to share their own positive experiences with one another, emphasizing the significance of gradual change and not stigmatizing failure.

## Literature Review

### A. Beneficial effects of mindfulness meditation on mental health

The practice of meditation in clinical settings has seen a spike in the last thirty years as

both health care providers and patients are choosing alternative treatments for health ailments. Scientific research on the effects of meditation on mental and physical health has consequently increased as well (Dakwar & Levin, 2009).

Meditation has been investigated for its positive effects on psychiatric illnesses, although evidence is still inconclusive. It is linked to improvements in depression, anxiety, drug abuse and reducing self-injurious behaviors (Haaga et al., 2011; Linehan, Comtois, & Murray, 2006; Shannahoff-Khalsa, 2003; Wolf & Abell, 2003).

Several evidence-based mechanisms have been proposed which occur as a result of mindfulness practices such as meditation. These mechanisms include:

1. **Structural brain changes:** Brain imaging studies have shown that mindfulness meditation is associated with changes in various areas of the brain (Holzel et al., 2011a). This translates to increased learning and memory abilities (Holzel et al., 2011b). Additionally, individuals are better adept at maintaining control over their behaviors, decisions and feelings (Luders, Toga, Lepore & Gaser, 2009).
2. **Reduction in autonomic nervous system response and increased relaxation response:** Mindfulness meditation affects the vagus nerve, which is responsible for regulating the heart and respiration rates, by increasing its output (Telles et al., 2013). Reduced autonomic response leads to an increase in the relaxation response in both psychological and physical capacities (Khanna & Greeson, 2013).
3. **Shift of perception:** Mindfulness practices lead to changes in the way one relates and reacts to thoughts, feelings and stimuli of the senses. Consequently this translates to better adjustments to difficult psychological processes (Jerath, Barnes, Dillard-Wright, Jerath & Hamilton, 2012).

4. **An increase in spirituality:** Van Gordon, Shonin & Griffiths state that mindfulness practices are associated with a deeper sense of spirituality which helps deter feelings of loneliness and of being overwhelmed (as cited in Shonin & Van Gordon, 2016).
5. **Greater situational awareness:** Mindfulness improves one's ability to adjust to social and physical environments. Heightened situational awareness assists in decision making, job performance and better foresight of situations (Shonin & Van Gordon, 2014).
6. **Value Clarification:** Value clarification is the ability to identify what is valuable and meaningful in life (Shapiro, Carlson, Astin, & Freedman, 2006). Value clarification helps weave the connections between mindful-awareness and the reduction in symptoms of psychological illness (Carmody, Baer, Lykins, & Olendzki, 2009).
7. **Increase in self-awareness:** Mindfulness improves self-awareness which consequently develops an individual's ability to identify negative moods and thought patterns (Gillespie, Mitchell, Fisher, & Beech, 2012).
8. **Addiction substitution:** There is evidence to suggest that the peaceful and pleasurable mental states achieved with mindfulness can be substituted for the "high" that is felt by individuals with addictive behaviors. Via this modality, negative addictions are replaced by "positive addictions" (Shonin, Van Gordon, & Griffiths, 2014).
9. **Urge surfing:** Urge surfing constitutes not reacting to mental urges by metaphorically "surfing the urge." This has been a proposed method of action for mindfulness as it relates to addiction (Appel & Kim-Appel, 2009; Shonin & Van Gordon, 2016).
10. **Letting go:** Van Gordon, Shonin and Griffiths declare that mindfulness lessens the mental affinity to objects, persons, circumstances and concepts and encourages letting go of negative conditions before they dominate one's thoughts and behaviors



(Shonin & Van Gordon, 2016)

A goal at the forefront of the facility's endeavors is to improve the quality of life of those afflicted with mental illness. Any modalities which increase autonomy, self-care, independence, emotional and mental stability, judgement, insight and mood have potential and valid use within the framework of the organization. Mindfulness techniques disengage individuals from unconscious and involuntary negative habits, behaviors and thoughts. Inversely, these techniques promote healthy behavior regulation and informed, self-aware decision making. Ultimately this leads to an enhancement in well-being (Brown & Ryan, 2003).

#### B. The role of health promotion education for the mentally ill

It is estimated that one in four Americans suffers from mental illness annually. Those afflicted with mental illness are disproportionately more likely to be disabled and affected by comorbid disorders (Kessler, Chiu, Demler, & Walters, 2005). The mentally ill are subject to a shortened life expectancy, poorer health literacy and higher rates of poverty (Van Metre, Chiappetta, Siedel, Fan, & Mitchell, 2011).

Considerable morbidity and mortality present in this population is preventable. Common comorbid disorders include diabetes, obesity, heart disease and tobacco use. In addition, it is highly likely that many physical ailments are under diagnosed or misdiagnosed in those with mental illness. In the 2006 report *Morbidity and Mortality in People with Serious Mental Illness* by Parks, Svendsen, Singer, Foti and Mauer (as cited in Van Metre et al., 2011), it was specified that there is a 25-year decreased life expectancy in those with chronic mental illness. This report highlighted that much of this discrepancy is due to preventable medical ailments.

Recovering from mental illness focuses on improving one's quality of life, enhancing

coping skills, preventing hospitalization and instituting a healthy lifestyle (Swarbrick, 2006). Interventional programs serve as a catalyst for process. Byrne, Brown, Voorberg, & Schofield (1994) report that many interventional programs take a triad approach which includes wellness education, a guided activity or exercise and a concentrated behavioral intervention (as cited in Van Metre et al., 2011). Individuals with mental illness are generally a challenging intervention group and ongoing research is needed to investigate the most beneficial efforts in promoting health and well-being for this population.

A typical setting where it is expected one would receive health promotion education is in a health care provider's office. Yet in this setting, the education provided is often haphazard and the level of literacy of the listener is infrequently evaluated. It is preferable that wellness education programs be conducted in a methodical manner (Van Metre et al., 2011). In one study, mental health consumers indicated that they favored receiving their information from health care workers as opposed to the internet and electronic sources (DiFranco, Bressi, & Salzer, 2006). Given that individuals with mental illness rely on the health care system and its workers for health promotion knowledge, nurses and advanced practice nurses are highly capable of functioning in the role of educators for health promotion programs.

The eight week Wellness Education Group Intervention (WEGI) project conducted by Van Metre et al. (2011), utilized nursing students to teach health promotion lessons and skills for disease prevention to a group of individuals with mental illness. Participants of the program found that it offered them something productive to do, reported satisfaction with the program and the health information and indicated improved confidence and incentive to change and to implement positive health behaviors. Many participants expressed desire in learning more about

nutrition and diabetes, the aging process, building healthy relationships and gaining self-confidence.

The project conducted at the mental health facility shared similar intentions with many intervention programs such as WEGI. It was guided by the understanding that the mentally ill are at a disadvantage in their rates of morbidity and mortality due to preventable health ailments. It served an advantage by providing much of the needed health literacy which is lacking in the lives of the mentally ill. It also generated a platform on which participants could ask questions and engage with others to further expand knowledge on health and wellbeing.

### C. A wellness approach for mental illness

Recovery is a very personal process; engaging mental, physical, emotional and spiritual efforts when in the face of trauma, illness or a crisis. The desired byproduct of successful recovery is the adjustment of attitude, beliefs, goals and actions to facilitate vitality and wellbeing. Recovery is thus better defined as healing and restoring health and wellness in the face of illness and life obstacles (Swarbrick, 2006).

Wellness is a deliberate practice which beckons a person to make choices which lead to positive lifestyles. It entails adapting and generating behaviors that are balanced, meaningful and satisfying through all dimensions of being (physical, emotional, spiritual, mental, intellectual, environmental and social). One becomes an active participant in his treatment, decisions and self-care (Swarbrick, 2006).

The traditional medical model and the wellness approach for health vary significantly. The medical model relies heavily on quick stabilization and a reduction of symptoms. It has a

deficit approach in that it focuses on deficiencies and inabilities. Individual skills, interests and abilities are often overlooked. This constricted “limitations” view has much potential to hinder rather than support recovery. The inverse of the medical model is the wellness approach. It welcomes personal goals and preferences, individual strengths and interests. This pushes forth an optimistic attitude and internal motivation.

Under the wellness approach, a person is empowered to preserve his or her health by being an active participant in the recovery process. There are no fear tactics at play which can generate a reflex oppositional reaction. An individual is more adept at organically perceiving and correcting any imbalances.

In a medical system that often mimics an assembly line, it is crucial to have an anchor point where one can lean on to assist in making well rounded decisions with the best use of available information. The members of the mental health facility are active in programs which aim to promote self-empowerment via classes on life skills and health and by creating social coherence amongst people with a common need. The facility already has embraced the wellness approach by providing services that fill the deficit present in the medical system.

#### D. Health disparities in the mentally ill

The lifespan of people living with serious mental illness in the United States is 25 years shorter than the regular population. Much of this mortality is due to preventable medical conditions and inadequate medical care. Studies show that those with mental illness have a higher prevalence of physical disorders such as diabetes, cardiovascular disease, respiratory disease, infectious diseases. Many psychiatric medications, in particular second generation antipsychotic medications are associated with weight gain, diabetes, dyslipidemia, insulin

resistance and metabolic syndrome (Parks, Svendsen, Singer, & Foti, 2006).

There exist a multitude of explanations as to why such disparities exist including patient, provider and system obstacles. Patient factors include a lack of motivation, fear, lack of social stability, low or non-existent employment and incarceration status. Provider factors include the level of comfort in treating individuals with mental illness, personal attitude and perception of the mentally ill population, the coordination of care and the stigma associated with address psychiatric issues with patients. Factors within the system include a poorly bridged system between general and mental health care services and lack of funding (Parks, Svendsen, Singer, & Foti, 2006).

Numerous modifiable risk factors have been identified which further perpetuate the increased levels of morbidity and mortality in the mentally ill. These include smoking (75% of individuals with mental illness smoke cigarettes in comparison with 23% of the general population), alcohol use, poor nutrition and obesity, low levels of physical activity, unsafe sexual practices and drug use. Less modifiable risk factors are also presents and they include many of the sequelae of having mental illness such as impaired reality perceptions, disorganized thoughts, poor communication and impulse control, paranoid thoughts and unstable moods (Parks, Svendsen, Singer, & Foti, 2006).

The facility is an epicenter of individuals who are subject to a multitude of health disparities. All members are diagnosed with a form of mental illness and are from lower socioeconomic backgrounds in addition to having lower literacy and education levels. Understanding the challenges and the most common health afflictions which challenge this population translates to formulating an educational plan which is tailored to meet its unique health needs and knowledge gaps.

#### E. Barriers in health and disease-management education

Health education directed towards persons with chronic diseases in the form of customized patient education or general health education seminars can profoundly influence one's knowledge of disease processes and the effects of lifestyle on health and ailments. It can also promote compliance to prescribed treatments and medications as well as decrease morbidity and mortality (Sharaf, 2010).

Chronic disease management relies heavily on the involvement of both the patient and their provider in maintaining health. There exist opportunities during routine health visits to relay the appropriate tools for disease management in the form of education to patients. In theory, patient education is meant to empower the listener with skills for health related decision making, but in reality the quality and quantity of education that is generated during healthcare provider visits is not ample enough to serve this function.

Patient education is becoming an increasingly more challenging task as patient visits are being constrained to shorter face-to-face times with healthcare providers. Simultaneously, the complexity of disease related information that must be conveyed continues to increase. Medscape surveyed more than nineteen thousand doctors in twenty six specialties for its 2016 Physician Compensation Report. Part of the report included the average time physicians spent with each patient. Based on the responses, the average patient encounter was thirteen to sixteen minutes long, a figure much too low to promote adequate and comprehensive medical care (Peckham, 2016). Other barriers that inhibit patient education are literacy, language, culture, and physiological difficulties. A well-formulated education plan in the outpatient or community setting can increase the chance of health recovery. One which enhances, supports or supplements the education traditionally encountered in a medical office visit is fitting to fill

many patient education deficits (Beagley, 2011).

Literacy is one's ability to read and write in a specified language. Low literacy affects various members of a society and can significantly interfere in one's ability to understand and perform life activities. Typically, lower levels of literacy are partnered with particular demographics including having low levels of education, lower cognitive abilities, being elderly, being a member of certain ethnic groups, female gender, incarceration status and low income status. According to *Healthy People*, health literacy is the extent to which people have the ability to obtain, process and understand basic health information and services needed to make suitable health choices (National Network, n.d.). Individuals with mental illness are often plagued by low health literacy secondary to a lack of tailored patient education approaches and insufficient time for an adequate dialogue or exchange of information by healthcare providers (Beagley, 2011).

Biases in health education exist which don't consider the cultural ideologies and language use of a particular group of people. Health education must be executed in a fashion which acknowledges and accommodates the core values, attitudes, beliefs and behaviors of the audience. One's level of understanding of the English language is also a barrier in absorbing educational material in any context (Beagley, 2011).

Multiple physical and environmental factors contribute to the limitation of effectively providing health education. Altered mental capacities, deficits in hearing and vision, memory loss, decreased reason and processing times are a result of natural causes such as aging, medication side effects and disease processes. Physical conditions such as pain, lack of mobility and feeling unwell are also effects which are rooted in internal and external circumstances. All these factors can blunt one's ability to comprehend and be receptive to educational material

(Beagley, 2011).

Learning styles differ vastly amongst individuals. Visual learners prefer to see what he or she is learning such as through pictures and images. Auditory learners prefer to be talked through a process and to hear the message and instructions prior to reading information. Kinesthetic learners are partial to movement and a more hands-on approach. Alongside learning styles exist teaching methods. These include lectures, demonstrations, discussions and the use of printed information and technology (such as internet and television). More than one teaching strategy may need to be used to accommodate the various degrees of learning preferences (Beagley, 2011).

The diversity present in the day facility is a clear representation of how health education is not suited to take a “one size fits all” approach. It is difficult in the presence of limited time and resources to accommodate all individual learning needs. Wellness programs such as the one provided by the author are one tier of a multi-layered approach in reaching out to a vulnerable population. It is meant to be altered and redesigned to reflect the individual intricacies of the audience.

### SECTION III METHODOLOGY

#### Approval Process for the Project

The beginnings of this project started surfacing in 2015, which marked the midway point of the author’s academic career at Seton Hall University as a DNP student. During this time, scholarly project ideas were being considered for implementation. In the fall semester of 2015, in collaboration with the DNP Program Director, the author expressed interest in executing a



quality improvement project focused on mental health. The facility was identified as a potential site as it already had a history of collaborating with DNP students and fit the author's criteria and preferences. It was determined that this site met the desires of the author to generate a quality improvement initiative within the mentally ill population. At this point, a meeting was initiated with the facility's Program Director which occurred on December 17<sup>th</sup>, 2015. At this meeting, with the guidance of the DNP Program Director, the author was given a physical tour of the facility, met members from numerous departments and staff serving various functions. Over a period of three more meetings, the author further discussed with the facility's Program Director their needs, goals and visions.

During the final meeting, the facility's quality assurance tracking sheets were presented to the author by the facility's Program Director. The author outlined her project goals and tentative plan of action and went over the visions and goals of the facility with the Program Director. During this meeting, it was decided that the department receiving the wellness program education would be Members Services. This decision was made due to these members being identified as higher risk and higher needs members who would benefit from the program. Finally, the DNP Program Director and the facility's Program Director in collaboration with the author, agreed on an appropriately integrated educational wellness program. The author then created an outline to produce wellness program modules for the Member Services department of the facility.

Prior to initiating the onsite wellness program, the author completed the necessary entry process which included filling out applications and paperwork and providing the facility with the requested professional licenses. Due to the nature of this project and there being no research subjects, an Institutional Review Board approval was not required by the facility or by Seton

Hall University. Any private health information that was encountered was kept in complete confidentiality as per the Health Insurance Portability and Accountability Act (HIPAA).

Along with the DNP Program Director, the Program Director of the facility was in agreement to serve as the second member of the DNP Scholarly Committee. She was an individual within the facility who was regularly engaged and in communication with the facility participants. She was involved in the day-to-day events of the facility in addition to serving as a facilitator in the broader facility agenda with the executive members and actively promoted the facility's initiatives. Her wide range of responsibilities at the facility and her direct influence on the success of the facility made her an ideal individual to serve on the committee. The third member consisted of a faculty member of Seton Hall University who had also completed a DNP degree with the university. Her extensive clinical knowledge, in particular from working in women's healthcare among underserved populations served as a relevant match for the author's project which also targeted an underserved group.

The risks of implementing this project were limited but multi-factorial. The first most prominent risk was that the project would not meet the goals and quality initiatives of the facility, thus not serving a benefit. This risk was mostly correlated with the limited physical and fiscal resources available for the project. It was also associated with the complex needs of the Member Services participants who were identified as being more symptomatic and a higher risk group. Although this project was created to be applicable to a diverse audience with differing cognitive and literacy abilities, this might not have been enough to provide a successful program in such a population. Another identified risk was that the longevity of the program for future use would be limited by the inability to find a healthcare professional to execute the program. Due to the nature of this program and the high level of interactions and questions initiated by the

participants, the ideal teacher would be an advanced practice nurse, who had abundant clinical knowledge and an in-depth understanding of disease processes. In addition to these risks, it is necessary to acknowledge that participants may have misinterpreted some of the educational information provided and wrongly applied it to their healthcare practices. In addition, participants may have found it difficult to incorporate the health literacy information provided in the program into their own lives due to the effects of their mental illness and their limited financial and social resources.

The benefits of the wellness program were also multi-factorial. From an administrative perspective, one benefit would be that the program itself was successful in assisting the facility in meeting its member health quotas and provided it with increased bargaining power in receiving funding based on its quality services and programs. Another benefit, which was the most significant for the author, was that the program provided the participants with an increased awareness of their own health and empowered them with the information necessary to make more health-conscious decisions in addition to engaging in health-promoting behaviors. A final benefit was that the wellness program served as a template for future programs of its kind to be created and utilized by this and other similar facilities with health initiatives which serviced underserved populations.

### Phases of the Project

#### Phase I: Needs assessment process

The needs assessment identification process occurred during phase I. The first component of this phase merged the author's research, personal and professional experiences

with the scope and aims of the DNP scholarly project. The first step of the project's needs assessment process was to ascertain which aspects of health and disease were most beneficial to present in a twelve to sixteen week teaching model. This phase involved identifying health disparities in the chosen population and pairing the disparities with appropriate disease and lifestyle specific teachings. Project objectives and outlines were then generated. The second component of phase I involved recognizing the expectations and intentions of the facility. All findings were blended to craft a vision for a program which met the goals of the author, the DNP program and the facility.

As outlined in the facilities 2016 Strategic Plan, one aspect of the facility's three year plan was to "Emphasize wellness, recovery and the integration of physical and mental health in all MHAEC [Mental Health Association of Essex County], while working with consumers to increase their independence" (Mental Health Association of Essex County [MHAEC], 2016a, p. 5). The facility has a three year accreditation from the Commission on Accreditation of Rehabilitation Facilities (CARF). CARF is a nonprofit accreditor of health and human services and programs. Through a consultative accreditation process and continued improvement services, CARF aims to promote the quality, value, and optimal outcomes of services to facilitate the improvement in the lives of those served (Commission on Accreditation of Rehabilitation Facilities [CARF], 2017a). Under CARF's accreditation, the facility maintains a "health home" program. A health home is defined as a method of healthcare delivery which incorporates an integrative, whole-person approach. This approach blends primary care, behavioral health, community and social support services to address mental and physical needs by linking them to the appropriate resources. The health home is equipped to represent a recovery-focused model which promotes independence. By doing so, it encourages healthy lifestyle habits, provides

education, prevention and educational services which promote wellness and self-care. Members of the facility are supported to manage their chronic health conditions (Commission on Accreditation of Rehabilitation Facilities [CARF], 2017b; Mental Health Association of Essex County [MHAEC], 2016b).

As part of chronic health condition management and the health home initiatives, the facility monitors several health indicators. These include Body Mass Index (BMI), Vitamin D levels, blood glucose levels and blood pressure levels. For the 2016 fiscal year, the goal was to generate a 20% increase in the number of individuals who fall within the normal parameters of the previously mentioned health indicators (Mental Health Association of Essex County [MHAEC], 2016c, p. 33). By becoming familiar with and integrating these factors, the author was better suited to tailor a more functional and relevant wellness program.

#### Phase II: Obtaining stakeholder support

Obtaining stakeholder support occurred to some extent during phase I, but was ultimately finalized in phase II. Much of what the facility offers is done through a limited budget. Since the proposed project used minimal resources and in fact aided in meeting some of the fiscal and quality indicator metric goals of the facility, gaining approval was not difficult. Through verbal communication, the Program Director, the case workers and other staff members were given the opportunity to understand what the role of the DNP student would be in working with the facility through this project.

Discussions regarding potential costs of supplies and resources (i.e., handouts, lecture material) indicated that if necessary, monies could be allocated for these purposes. A possible incentive program with small prizes was also a topic of discussion, but was eventually discarded.

Since the facility already had an established relationship with Seton Hall University by accepting DNP student project implementation from previous years, there was a level of trust that existed from the beginning. Through onsite visits, the members of the facility became familiar with the author's role at the facility and expressed interest in participating in the program. The staff of the facility became aware that this project expanded the role of the advanced practice nurse to become a healthy lifestyle pioneer for the members at the facility, which would then translate back into the immediate community.

### Phase III: Initial implementation steps

The implementation began once the onsite educational sessions commenced. The author had generated a template of topics to be covered with corresponding handouts (Appendix A) and lesson plans (Appendix B) which were projected to span over ten to twelve sessions, with one forty-five minute session being executed per week. The topics included an introduction to wellness and meditation, nutrition, physical activity, diabetes, hypertension, osteoarthritis, health maintenance and preventative health, the benefits of meditation, cardiac arrhythmias and heart failure and renal disease. The author's lesson plan intentions consisted of the first thirty-five minutes being allotted to the teaching of the topic material, and the final ten minutes being allotted towards a guided meditation. On the day of the first scheduled educational session, the author met with the DNP Program Director to discuss any fears, concerns and final project questions. The DNP Program Director was conveniently located in the same building as the facility for most of the scheduled sessions. This permitted for a smoother transition. The first onsite lecture occurred on March 10<sup>th</sup>, 2016. A Case Manager was present to document the material covered and the classroom interactions and responses. Due to a scheduling change, the

first lecture was not presented to the originally intended audience of the Member Services department, but instead to the Senior Services department. This particular group included members of the program who were fifty-five years and older. Because these members were not the intended ongoing recipients, the lecture was modified to provide tailored information which did not overly address future program plans. The first official lecture to Members Services was executed on March 17<sup>th</sup>, 2016. Day one of the educational series comprised of an introduction of the author, her professional background, her affiliation with the facility and Seton Hall University, and the purpose of the wellness program. A basic introduction to wellness and its role in health was provided in addition to the benefits of meditation. A basic questionnaire to assess nutrition and physical activity status was handed out for completion. Due to the wide range of cognitive abilities of the individuals in the audience, not all questionnaires were completed and returned on the same day. It is important to note that in addition to this, not all participants were able to adequately and correctly answer the questions, thus upon review of the questionnaires, the author decided to withdraw them from the project. The goal of the questionnaires was to conduct a pre-program and post-program nutritional and physical activity assessment as a tool for assessing the program's effects on these topics.

The first session proved to be very successful despite the schedule change and questionnaire issue. The audience was receptive to the information and engaged with questions and feedback regarding the program. This provided the author with meaningful information about the way the program was set up and executed.

#### Phase IV: Ongoing implementation process

The author's intention was to cover one topic per session and if necessary continue the

topic for a second session the following week. In actuality, due to the high amount of audience questions and frequent audience comments, many topic sessions were extended for two sessions and at times even three or four. This was concerning initially to the author as it meant that the program would go beyond the anticipated ten to twelve week time frame. As the program progressed, the author realized that it was of greater benefit for the audience to allow sufficient time for questions and comments than to attempt to compress all the information of a topic into one session at the expense of not addressing the concerns and questions of the audience. The author also quickly realized that by engaging in an open dialogue and exchange with the audience, she was able to more efficiently gain their trust, attention and interest. As there was no pre-determined mandatory time limit to the program length, this was not a significant concern.

The second topic was on nutrition, cholesterol and diet. The amount of material that was covered along with the audience questions led to this session lasting slightly over three days. The dates for this topic included March 24<sup>th</sup>, March 31<sup>st</sup>, April 7<sup>th</sup>, and April 14<sup>th</sup>, 2016. Information on different aspects of nutrition and dietary choices was covered. The effects and prevention of high cholesterol were covered. Handouts on diet and healthy food options were provided. In addition, a live presentation of portion sizes was demonstrated to emphasize salt and sugar content in food. The audience was also given interactive nutrition “bingo” and trivia games to participate in. Two five to ten minute guided meditation sessions were incorporated at the end of two of the nutrition sessions.

It was partly due to the live presentation and the games that caused the topic of nutrition to last so long. The author acknowledged that in order to stay within a reasonable time-frame, she would omit such components in future lessons.

Physical activity was the third topic and spanned over the dates of April 14<sup>th</sup> and April



21<sup>st</sup>, 2016. Various styles of exercise and ways to increase physical activity safely were taught. A ten minute guided meditation was performed. A handout on physical activity was also provided.

Diabetes was the fourth topic which occurred on April 28<sup>th</sup>, 2016. An overview of the disease was provided, along with symptomatology, complications and the effects of diet and exercise on the disease process. A handout was provided covering information on the illness. A five minute guided meditation was performed.

Hypertension was the fifth topic which was taught on May 5<sup>th</sup> and May 12<sup>th</sup>, 2016. As with diabetes, an overview of the disease was provided. Its complications were discussed, along with target blood pressure ranges and the effects of lifestyle on the role of disease development and progression. A handout was provided with information on hypertension. A ten minute guided meditation was performed.

Osteoarthritis was the sixth topic, and this occurred on May 19<sup>th</sup> and part of May 26<sup>th</sup>, 2016. An overview of the disease process was discussed, along with ways in which the disease is managed. A handout was provided with information on osteoarthritis. A ten minute guided meditation was performed.

Health maintenance and preventative health measures were the subjects of the seventh topic, and they were taught on May 26<sup>th</sup> and June 2<sup>nd</sup>, 2016. Various topics on preventative screenings, cancer, personal and environmental risk factors and lifestyle as they affect health and morbidity were covered. A handout was provided with basic preventative health measures. A five minute guided meditation was performed.

Meditation practices were the eighth topic, which occurred on June 9<sup>th</sup>, 2016. The benefits of meditation were discussed, along with the evolving research behind the health

benefits of meditation. Simple ways to add mindfulness and meditation into one's day were covered. A handout on meditation practices was given and a ten minute guided meditation was performed.

Heart failure and cardiac arrhythmias were the ninth topics, which occurred on June 18<sup>th</sup> and June 23<sup>rd</sup>, 2016. A basic overview of the anatomy of the heart was provided, along with a review of some common heart conditions. The effects of diet and exercise on the heart were incorporated into the lecture. A handout on basic heart conditions was provided. No guided meditation was performed due to time constraints.

Chronic kidney disease was the tenth topic, which occurred on July 7<sup>th</sup>, 2016. A basic anatomy of the kidneys was discussed, along with an overview of the disease process of kidney failure, prevention and the effects of lifestyle on kidney health. A handout on chronic kidney disease was provided. A five minute guided meditation was performed.

The author's program was originally structured to cover ten topics. An eleventh topic was added, based on the requests of the audience to cover information that was not addressed during the wellness program itself. This occurred on July 14<sup>th</sup>, 2016. The eleventh session was not an official part of the wellness program but it was worth noting that it was an essential component of creating a well-rounded learning experience for the audience. Various topics were covered based on the audience suggestions and requests. These included clarifying some health-related misconceptions, questions on cancer, organ transplantation and smoking cessation. A short trivia was added at the end. No guided meditation was performed and no handouts were given for this session.

During each session while the guided meditation was being performed, an average of eight individuals were fully participating in the meditation exercises. They demonstrated

engagement for at least five out of the ten minutes. Participation was determined based on observation of posture, breathing pattern, eye closure and ability to sit still and minimize movement. About an average of five individuals per session were noted to be participating under five minutes. Roughly ten individuals during the sessions were participating by demonstrating engaging in at least one of the meditation exercise components (i.e. eye closure) but typically not for longer than two minutes. Overall, nearly the entire room of participants was able to maintain silence with the exception of infrequent incidences of conversation.

#### Phase V: Evaluation Process

The author's initial chosen method of program evaluation was through two pre-session and post-session audience questionnaires, one of which was handed out during the nutrition session. The goal was to assess physical activity, diet and health habit status prior to and after the wellness program. As discussed earlier, due to the highly varied cognitive abilities of the participants and the inconsistencies in answering the questionnaires, this method of data collection became unreliable. Instead, the seven Case Managers who were present for the lessons were given a sixteen question survey which included both a quantitative and qualitative review.

Furthermore, the author also gathered inferences about the success and effectiveness of the program based on her regular interactions with the audience members. Multiple audience members expressed their interest in the material during and after the sessions. Several audience members were noted to be taking notes during the sessions. Many participants actively engaged with the author by asking further questions on the topics which were covered. On many occasions, audience members also engaged in conversation amongst themselves during the

session, showing enthusiasm about the topics which had been covered.

### Data Collection

The seven Case Managers who were present during the sessions were provided with the evaluation and all seven responded. The survey was anonymous. The purpose of the survey was defined as evaluating the outcomes and effectiveness of the wellness classes.

To evaluate the level of knowledge acquisition following the wellness program, the first two survey questions inquired about the audience's pre and post program knowledge. Four Case Managers believed the audience to be "extremely knowledgeable" about the subject matter presented in the program prior to the program's execution. Three believed the audience to be "very knowledgeable" about the subject matter presented in the program prior to the program's execution. Based on the Case Managers' responses concerning the audience's knowledge acquisition following the program, it was noted by the author that the survey question may not have been appropriately understood. Of the four Case Managers who believed the audience members were "extremely knowledgeable" about the subject matter prior to the program, three felt the audience was "very knowledgeable" after the program's completion and one felt the audience was "somewhat knowledgeable" after the program's completion. Both of these sets of responses indicate a decline in knowledge acquisition following the program's completion.

When asked to indicate on a 0 (not at all likely) to 10 (extremely likely) point scale how likely it is that they would recommend the wellness program to be taught at another similar facility, three Case Managers scored it a 10, three scored it a 9 and one scored this question a 7.

When asked to indicate on the same 0 to 10 point scale how likely it is that they would recommend the wellness program to be taught again at their facility, three scored it a 10, two

scored it a 9 and two scored it an 8.

An evaluation of the quantity and quality of the handouts provided was surveyed. Of the seven Case Managers, one believed the supplemental handouts were “extremely helpful,” four believed they were “very helpful,” and two believed they were “somewhat helpful.” Three Case Managers believed additional supplemental handouts should have been provided and four believed that the amount of handouts provided were sufficient.

An assessment of general program objectives was evaluated. Two Case Managers believed the program was “extremely effective” in educating the audience on healthy dietary guidelines and goals. Four Case Managers thought the program was “very effective” in this same objective, and believed the program was “somewhat effective.”

Two Case Managers believed the program was “extremely effective” in providing a basic understanding of meditation practice for stress management. Four Case Manager’s believed the program was “very effective” in meeting this objective and one Case Managers believed it was “somewhat effective.”

Two Case Managers rated the program as “extremely effective” in educating the audience on healthy physical activity regimens and recommendations and five rated the program as “very effective” in meeting this objective.

One Case Manager rated the program as “extremely effective” in educating the audience on the prevention of many common chronic diseases. Five Case Managers rated the program as “very effective” in meeting this objective and one Case Manager rated the program as “somewhat effective” in meeting this objective.

One Case Manager rated the program as “extremely effective” in reinforcing the importance of chronic disease management. Five Case Managers rated the program as “very

effective” and one Case Manager rated the program as “somewhat effective” in meeting this objective.

All seven Case Managers felt that the speed with which the course material was presented was “about right.”

Four qualitative questions were addressed during the final portion of the evaluation to obtain a more personal and descriptive perspective of the program. Not all of the surveyed Case Managers responded to every question in this portion of the evaluation.

The strengths of the program which were identified included:

“Information”

“Information was presented so all could understand at a basic level”

“Insight”

“The material was very effective”

“The identifiable information. I can identify with it in my life”

The weakness of the program which were identified included:

“Needed more time”

No topics were suggested for omission from the program. The topics which the responders felt should have been added:

“The long term effects of taking psychiatric medications.”

What was most liked about the program:

“It covered several topics instead of one”

“Very well run”

“Material was brought forth by a good teacher”

“Presentation and meditation”

Following the wellness program’s completion, the author contacted the facility’s Program Director who also further reinforced her satisfaction with the benefits of the wellness program for this vulnerable population. Overall, the feedback was positive, with several neutral responses and minimal negative responses. It was evident that the Case Managers and the Program Director felt that the audience benefitted from this presentation and that the program was well run. The audience members also expressed their gratitude and appreciation for the information they received during the program. This was mostly evident in their request have an eleventh session. The program provided a varied perspective on numerous topics which were applicable to this population. This program was also identified as suitable to be applied in the future to this and other similar facilities, making it a sustainable initiative.

## SECTION IV PROJECT OUTCOMES AND SUMMARY

### Final Thoughts and Recommendations

The author, the DNP Program Director, the Case Managers and Program Director of the facility are confident in the outcomes and effectiveness of this project’s implementation. The cost of executing this project is low, as it uses minimal resources. The resources typically

include making photocopies of handouts for twenty to thirty five people and providing a dry-erase board with markers and an eraser for the lecturer. If props such as food items are to be used in the future as they were trialed in the beginning session of the program by the author, these can also be purchased at a minimal cost of around \$10-\$30, depending on the items to be used.

It is necessary to mention that at any given time during the program, an average of one to four participants did not understand the English language sufficiently to incorporate or understand the material that was covered. The facility may find it useful to present a separate program for Spanish speaking individuals, since a number of members within the facility fall into this category.

In an effort to keep program costs down, the author suggests to use material and handouts sourced from medical organizations and government websites which do not require permission to use or have associated fees.

The material covered in this program was largely constructed based on the author's six years of combined clinical experience in working as a healthcare provider, both as a registered nurse and a family nurse practitioner. The majority of those years were spent working with underserved populations. She also collaborated with the DNP Program Director who has a presence in the facility as a primary care provider for many of the members. Although the material was planned with much consideration of the vulnerabilities of the population at the facility, it will be of benefit in future plans for similar programs that the presenter survey the audience on which material and topics they feel they want to gain more information.

The final matter which has to be considered for sustainability is that this program is best taught by an advanced practice nurse. The reason being that based on the author's experience



with the program, many of the questions which were asked by the audience members required an in depth understanding of disease processes, current medical treatments and health related behaviors. The program can be modified and executed by a registered nurse using the supplemental materials and program guidebook provided by the author. The trade-off would be that less clinical information would be available to the audience. This has to be taken in context, as the program itself is highly beneficial even in the presence of this setback. The author acknowledges the importance of the interactions and feedback with the audience and their questions, but this is a supplement to and not a major defining aspect of the wellness program itself.

For purposes of future use, a “project handbook” (Appendix B) has been provided to the facility as a template for future presenters to use. This handbook includes lecture material on the topics which were covered, handout samples for distribution and useful links (Appendix C).

### Conclusion

This wellness program represents one example of how in a limited-resource setting, collaborations between local health service facilities and healthcare-degree-granting universities can be utilized and beneficial. The results of such programs are enriching not only for the populations that are being serviced by the facilities, but also for the graduates of the universities who are or will be serving as healthcare providers.

What this program has also brought to the surface is the connection and curiosity that people have with their physical, emotional and mental health. It is unfortunate that many individuals have been deprived of a balanced relationship with their well-being due to personal,

medical and social circumstances. It is evident though that once that curiosity is triggered and that awareness is awakened, there can only be a fundamentally positive progression towards health; this opportunity must be nurtured and cultivated to make it meaningful and lasting.

It has been a tremendous honor to have served as the nurturer and cultivator of this awakening by imparting my clinical and academic knowledge to the members of the facility. I learned as much from them as they did from me. Implementing this wellness program has been the most meaningful experience in my DNP academic career, and it has only brought to light how the role of the advance practice nurse does not terminate in the exam room. As many health clinics serving underserved populations utilize advance practice nurses for their health care services, the DNP educated nurse practitioner incorporates a deep understanding of the intricate mechanisms which affect well-being.

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## Appendix A

## Samples of Handouts



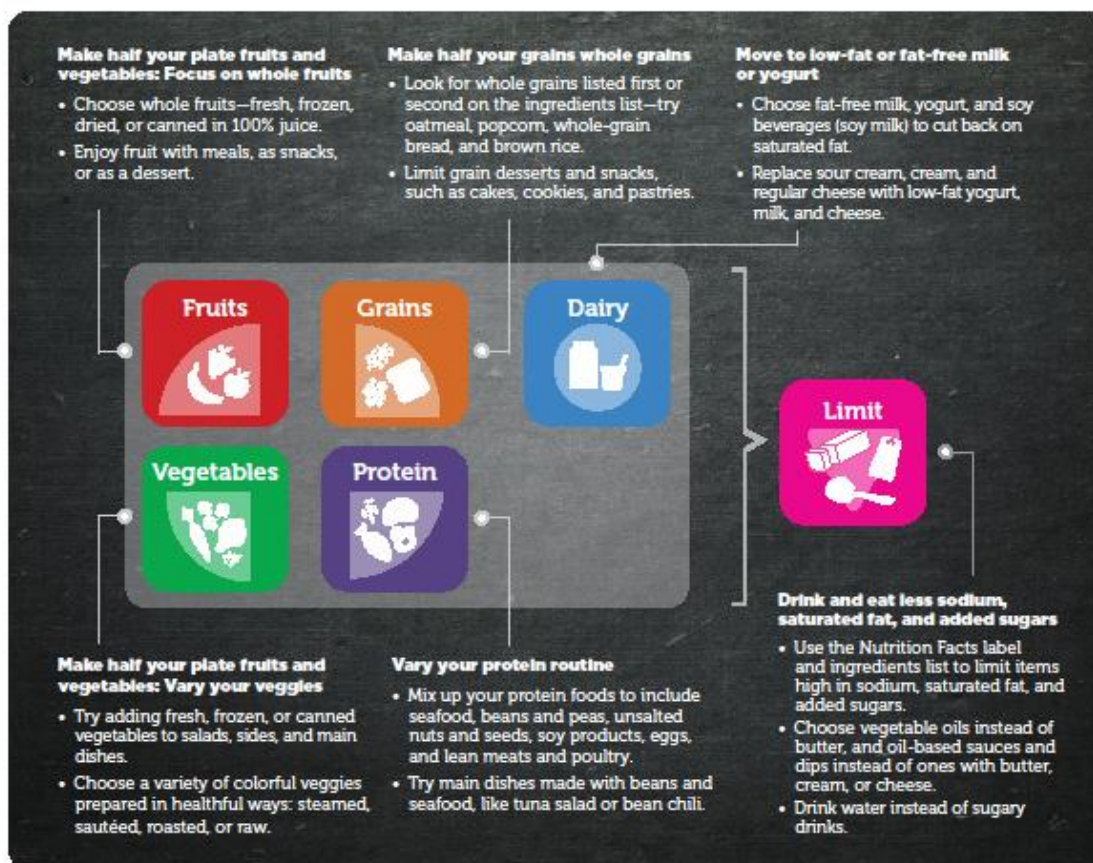
United States Department of Agriculture



## Find Your Healthy Eating Style & Maintain It for a Lifetime

Start with small changes to make healthier choices you can enjoy.

Follow the MyPlate building blocks below to create your own healthy eating solutions—"MyWins." Choose foods and beverages from each food group—*making sure that your choices are limited in sodium, saturated fat, and added sugars.*



**Everything you eat and drink matters.**  
The right mix can help you be healthier now and into the future. Find your MyWins!

Visit [ChooseMyPlate.gov](http://ChooseMyPlate.gov) to learn more.

Center for Nutrition Policy and Promotion  
January 2016

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**10  
tips**  
Nutrition  
Education Series



**MyPlate**  
**MyWins**

Based on the  
Dietary  
Guidelines  
for Americans

## Build a healthy meal

**Each meal is a building block in your healthy eating style.** Make sure to include all the food groups throughout the day. Make fruits, vegetables, grains, dairy, and protein foods part of your daily meals and snacks. Also, limit added sugars, saturated fat, and sodium. Use the [MyPlate Daily Checklist](#) and the tips below to meet your needs throughout the day.

### 1 Make half your plate veggies and fruits

Vegetables and fruits are full of nutrients that support good health. Choose fruits and red, orange, and dark-green vegetables such as tomatoes, sweet potatoes, and broccoli.



### 2 Include whole grains

Aim to make at least half your grains whole grains. Look for the words "100% whole grain" or "100% whole wheat" on the food label. Whole grains provide more nutrients, like fiber, than refined grains.



### 3 Don't forget the dairy

Complete your meal with a cup of fat-free or low-fat milk. You will get the same amount of calcium and other essential nutrients as whole milk but fewer calories. Don't drink milk? Try a soy beverage (soymilk) as your drink or include low-fat yogurt in your meal or snack.



### 4 Add lean protein

Choose protein foods such as lean beef, pork, chicken, or turkey, and eggs, nuts, beans, or tofu. Twice a week, make seafood the protein on your plate.



### 5 Avoid extra fat

Using heavy gravies or sauces will add fat and calories to otherwise healthy choices. Try steamed broccoli with a sprinkling of low-fat parmesan cheese or a squeeze of lemon.

### 6 Get creative in the kitchen

Whether you are making a sandwich, a stir-fry, or a casserole, find ways to make them healthier. Try using less meat and cheese, which can be higher in saturated fat and sodium, and adding in more veggies that add new flavors and textures to your meals.

### 7 Take control of your food

Eat at home more often so you know exactly what you are eating. If you eat out, check and compare the nutrition information. Choose options that are lower in calories, saturated fat, and sodium.



### 8 Try new foods

Keep it interesting by picking out new foods you've never tried before, like mango, lentils, quinoa, kale, or sardines. You may find a new favorite! Trade fun and tasty recipes with friends or find them online.

### 9 Satisfy your sweet tooth in a healthy way

Indulge in a naturally sweet dessert dish—fruit! Serve a fresh fruit salad or a fruit parfait made with yogurt. For a hot dessert, bake apples and top with cinnamon.

### 10 Everything you eat and drink matters

The right mix of foods in your meals and snacks can help you be healthier now and into the future. Turn small changes in how you eat into your MyPlate, MyWins.

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Go to [ChooseMyPlate.gov](http://ChooseMyPlate.gov)  
for more information.

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June 2011  
Revised October 2016

([www.choosemyplate.gov](http://www.choosemyplate.gov))



## What Are Type 2 Diabetes Risk Factors and Why Are They Important?

Type 2 diabetes is a *progressive* disease. That means it happens slowly over a long period of time. In fact, many people who have type 2 diabetes don't know it. They are *undiagnosed*, meaning their type 2 diabetes has not been identified (*diagnosed*) and, as a result, not treated. This puts them at risk for getting *complications* from their type 2 diabetes like amputations and kidney disease.

This handout reviews *risk factors* that increase a person's chance of getting type 2 diabetes.

### Age

Risk for type 2 diabetes increases with age. The American Diabetes Association (ADA) recommends that people be tested for type 2 diabetes starting at age 45, especially if they are overweight or obese.



### Obesity

Having a high amount of excess body fat also ups type 2 diabetes risk. Your healthcare provider will calculate your *body mass index*, or BMI, which is a measure of body fat based on your height and weight. The ADA says that all people with a BMI higher than 25 (or higher than 23 if you're Asian American) **plus** 1 or more other risk factors should be tested for type 2 diabetes—no matter what their age is.

### These are some other type 2 diabetes risk factors

- Not getting enough physical activity (exercise)
- Having a first-degree relative with type 2 diabetes. First-degree relatives are your parents, your brothers and sisters, and your children.
- Having high blood pressure or high cholesterol
- Being a member of these races or ethnicities—African American, Latino, Native American, Asian American, Pacific Islander
- Having a history of heart disease (*car-di-o-vas-cu-lar disease*)
- Having an A1C higher than 5.7%. A1C is an average of your blood glucose over 3 months. An A1C is one of the tests that can be used to diagnose type 2 diabetes.

### Talk with your healthcare provider about your risk

Early diagnosis is important for any disease or condition, and this is really true for type 2 diabetes. Talking with your healthcare provider about your risk means you can take action early to prevent type 2 diabetes if you don't have it—or treat it early if you do.

**REFERENCE:** American Diabetes Association. Standards of medical care in diabetes—2015. *Diabetes Care*. 2015;38(suppl 1):S1-S93.

March 2015

### Did you know?



**1 in 4** people have type 2 diabetes but don't know it



FOR MORE INFORMATION:  
TALK WITH YOUR HEALTHCARE PROVIDER



Ashfield  
Healthcare Communications

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## Your Personalized A1C Target

Each year, the American Diabetes Association (ADA) releases recommendations to help healthcare professionals treat and manage diabetes in their patients. Think of these recommendations as a roadmap for diabetes prevention and better care. Many topics are covered, including targets for blood glucose levels; changes you can make in your lifestyle, like a healthier diet or more exercise, to prevent diabetes or lower blood glucose levels; medications for treating diabetes; and ways to prevent complications of diabetes like amputations and kidney disease.

This handout focuses on the **ADA A1C target** for adults with diabetes. (Note: These targets are not for pregnant women with diabetes.)



### Your A1C target

A1C is a measure of the average amount of glucose in your blood over the past 3 months. Your A1C level is shown as a percentage: for example, 6.9%.

The general A1C target for adults is **less than 7.0%**. The closer you get to this target, the better your chances for preventing health problems from diabetes. These problems can include foot sores, eye disease and blindness (*ret-in-o-pa-thy*), kidney disease (*ne-phro-pa-thy*), and nerve damage (*neur-o-pa-thy*).

### Your A1C target could be higher or lower

The ADA says that A1C targets should be *personalized*, which means that your goal level will be chosen based on a few key pieces of information about your diabetes.

Your healthcare provider may set your **A1C target higher** than 7.0%, for example, if you have:

- A history of low blood glucose (*hy-po-gly-ce-mia*)
- Diabetes health problems that are difficult to manage
- Many other conditions that are related to diabetes, such as obesity or high cholesterol

Your A1C target may be **lower than 7.0%** if you:

- Are younger
- Have not had diabetes for a long time
- Do not have heart conditions (*car-di-o-vas-cu-lar*) related to diabetes

Your healthcare provider will work with you to set an A1C that's best for you.

**REFERENCES:** American Diabetes Association. Standards of medical care in diabetes—2015. *Diabetes Care*. 2015;38(suppl 1):S1-S93.

February 2015



FOR MORE INFORMATION:  
TALK WITH YOUR HEALTHCARE PROVIDER



Ashfield  
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## Appendix B

## Sample Lecture Material

**Post-Core: A Closer Look at Type 2 Diabetes Key messages to reinforce**

- According to the Centers for Disease Control and Prevention (CDC), there are approximately 26 million people in the United States with diabetes (2011).
- If you are diagnosed with type 2 diabetes, you and your doctor will develop a diabetes care plan. It would be recommended that your team of health care providers include: a primary care physician, a diabetes educator, a registered dietitian, a pharmacist, and other specialists as needed.
- We know that keeping blood glucose levels and other values, like blood pressure, lipids, etc. are important in preventing the long-term complications. Your doctor should provide a target range for you in each of these areas.
- There are symptoms and complications associated with uncontrolled diabetes. These can range from short-term to long-term problems.
- To reduce complications related to diabetes, you should try to maintain blood glucose levels within a given range, take prescribed medications as necessary, and develop a nutrition and physical activity plan.

**Symptoms of Type 2 Diabetes**

**Present:** Throughout the lifestyle intervention, we have spent a lot of time focusing on prediabetes and how type 2 diabetes can be prevented or delayed. This session will switch gears and provide information on type 2 diabetes and how it can impact life physically and emotionally.

According to the Centers for Disease Control and Prevention (CDC), there are approximately 26 million people in the United States diagnosed with diabetes in

2011, and there is support available to assist and guide people in managing the disease. There is also evidence to suggest that keeping blood glucose levels within a good range can prevent the complications of diabetes.

### **What are the Symptoms of Diabetes?**

The symptoms of diabetes can vary, ranging from mild to severe, or symptoms can even be absent. The most common symptoms include:

- Increased thirst
- Increased hunger
- Fatigue
- Increased urination, especially at night
- Weight loss
- Blurred vision
- Sores that do not heal

For people with type 2 diabetes, symptoms generally develop gradually. Many people do not find out they have type 2 diabetes until they develop a complication from the disease, such as problems with their vision or heart trouble. Often, a person can have the disease for many years before it is diagnosed.

([https://www.cdc.gov/diabetes/prevention/pdf/postcurriculum\\_session14.pdf](https://www.cdc.gov/diabetes/prevention/pdf/postcurriculum_session14.pdf))

## Appendix C

## Useful Links and Resources

- 1) **[www.cdc.gov](http://www.cdc.gov) (Centers for Disease Control and Prevention):** Information of various public health matters, health conditions, disease statistics, workplace safety
- 2) **[www.myplate.gov](http://www.myplate.gov) (United States Department of Agriculture):** Information on healthy eating habits, recipes, nutrition data
- 3) **[www.diabetes.org](http://www.diabetes.org) (American Diabetes Association):** Information on diabetes care, treatment and prevention
- 4) **[www.heart.org](http://www.heart.org) (American Heart Association):** Information on heart disease care, treatment and prevention
- 5) **[www.health.gov](http://www.health.gov) (Office of Disease Prevention and Promotion):** Information on diet, physical activity, health literacy and patient safety
- 6) **[www.arthritis.org](http://www.arthritis.org) (Arthritis Foundation):** Information on arthritis care, treatment and prevention
- 7) **[www.niams.nih.gov](http://www.niams.nih.gov) (National Institute of Arthritis and Musculoskeletal and Skin Diseases):** Health information, news and research on various skin and musculoskeletal conditions
- 8) **[www.ahrq.gov](http://www.ahrq.gov) (Agency for Healthcare Research and Quality):** Extensive coverage of medical topics and disease treatment, prevention, screening and management guidelines for healthcare professionals
- 9) **<https://nccih.nih.gov> (National Center for Complementary and Integrative Health):** Information for consumers and healthcare professionals regarding alternative medical therapies, herbals, supplements and complementary health modalities
- 10) **[www.strokeassociation.org](http://www.strokeassociation.org) (American Stroke Association):** Information regarding stroke, treatment, prevention
- 11) **[www.kidney.org](http://www.kidney.org) (National Kidney Foundation):** Information on kidney disease, treatment and prevention
- 12) **<http://www.mindfulschools.org/resources/explore-mindful-resources/> (Mindful Schools):** Mindfulness meditation tools
- 13) **[www.cancer.gov](http://www.cancer.gov) (National Cancer Institute):** Information and resources regarding cancer